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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/780,770	02/19/2004	Kiyoyuki Narimatsu	118776	2063

25944 7590 04/27/2006

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EXAMINER
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BAXTER, ZOE E

ART UNIT	PAPER NUMBER
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3735

DATE MAILED: 04/27/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Yp

<b>Office Action Summary</b>	<b>Application No.</b>		<b>Applicant(s)</b>	
	10/780,770		NARIMATSU, KIYOYUKI	
	<b>Examiner</b>		<b>Art Unit</b>	
	Zoe E. Baxter		3736	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-10 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1, 5-8 and 10 is/are rejected.
- 7) ☒ Claim(s) 2-4 and 9 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 2/19/04 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |  |
|--|--|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. ____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)            |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date <u>2/19/04</u> . | 6) <input type="checkbox"/> Other: ____  |

## **DETAILED ACTION**

### ***Information Disclosure Statement***

1. The Information Disclosure Statement (IDS) submitted on February 19, 2004 is acknowledged. Since the IDS complies with 37 CFR 1.97 and 37 CFR 1.98 the references submitted there in have been considered.

### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1, 5-8 and 10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Nunome et al. (U.S. Patent No. 6843772) and further in view of Ogura (U.S. Patent No. 6355000). Regarding claims 1 and 10 in column 3 lines 5-13 Nunome et al. discloses using two blood pressure measuring devices the first cuff adapted to be worn on a first portion of the subject and a second cuff adapted to be worn on a second portion. Nunome et al. further discloses a means of determining the pulse wave propagation velocity related information column 3 lines 15-43. However the teachings of Nunome et al. does not determine the pulse wave velocities relative to each blood pressure cuff. Ogura teaches a method of keeping the cuff pressures equal and measuring the blood pressures of the individual limbs simultaneously in column 9 lines

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43-65 a control device that controls the switch valves and air pump to inflate all three blood pressure cuffs to the predetermined target pressure value, once the target pressure is reached then all three cuffs slowly deflate at the same rate of about 3 mmHg/sec. This control device is the same as the claimed cuff pressure changing means the applicant claims since all the pressures are targeted to the same pressure then deflated at the same rate the pressures will always remain equal. Nunome et al. states that the invention determines pulse wave propagation velocity related information but never actually measures the pulse wave velocity. With the teachings of Ogura it is possible to measure the actual pulse wave velocity. This information can be used throughout medicine to aid in diagnosis of certain medical conditions. Rather than just comparing two limbs to determine if stenosis of an artery in a single limb has occurred, one can measure the pulse wave velocity throughout a healthy persons body. It would be obvious to one skilled in the art to combine the teachings of Nunome et al. and Ogura to calculate a pulse wave velocity by using two blood pressure readings, a time difference and a distance.

3. Applicant has provided evidence in this file showing that the invention was owned by, or subject to an obligation of assignment to, the same entity as Nunome et al. at the time this invention was made, or was subject to a joint research agreement at the time this invention was made. However, reference Ogura additionally qualifies as prior art under another subsection of 35 U.S.C. 102, and therefore, is not disqualified as prior art under 35 U.S.C. 103(c).

Applicant may overcome the applied art either by a showing under 37 CFR 1.132 that the invention disclosed therein was derived from the invention of this application, and is therefore, not the invention "by another," or by antedating the applied art under 37 CFR 1.131.

4. Claim 5 is rejected under 35 U.S.C. 103(a) as being unpatentable over Nunome et al. Nunome et al discloses in column 3 lines 5-14 that the apparatus includes a first blood pressure determining means which measures the first blood pressure.

5. Claim 6 is rejected under 35 U.S.C. 103(a) as being unpatentable over Nunome et al. Nunome et al discloses in column 3 lines 5-14 that the apparatus includes two blood pressure determining means which measure respective blood pressures of the first and second cuffs.

6. Claim 7 is rejected under 35 U.S.C. 103(a) as being unpatentable over Ogura. Ogura describes a pulse wave velocity relating information obtaining means that calculates one time difference and a velocity, column 7 line 54-column 8 line 17.

7. Claim 8 is rejected under 35 U.S.C. 103(a) as being unpatentable over Nunome et al. Nunome et al. discloses a display device in column 8 lines 1-9 which displays the pulse wave propagation velocity related information.

#### ***Allowable Subject Matter***

Claims 2-4 and 9 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the

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base claim and any intervening claims. Claim 2 defines over the art because none of the art shows an apparatus wherein the pulse wave velocity related information is obtained from a first and second pulse wave detected by the first and second cuffs when the pressing pressures are equal to a blood pressure of the subject.

8. Claim 3 defines over the art because none of the art shows that the pulse wave velocity related information is further obtained from the first and second cuffs when the pressing pressures are equal to a systolic blood pressure.

9. Claim 4 further defines that the pulse wave velocity related information is further obtained from the first and second cuffs when the pressing pressures are equal to a diastolic blood pressure. No prior art has shown a calculation of pulse wave velocity using the diastolic blood pressures of two cuffs simultaneously.

10. Claim 9 discloses an input device for inputting a stature of a subject and means for determining a distance between the first and second portions of the subject and determining a velocity by dividing the distance by the time difference. Prior art does not show an input device that determines a distance between the first and second portions of a subject based on stature.

### ***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Zoe E. Baxter whose telephone number is 571-272-8964. The examiner can normally be reached on Monday-Friday 7:30am-4:00pm.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Max Hindenburg can be reached on 571-272-4726. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

ZEB

Zoe E. Baxter  
Examiner  
Art Unit 3736

*Robert L. Nasser*  
ROBERT L. NASSER  
PRIMARY EXAMINER  
2009-11-10

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